

1 **(BSP December 2, 2002)**

2 **Finishing Polyester Concrete Overlay**

3 The finished surface of the polyester concrete overlay shall conform to Section 6-
4 02.3(10).

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6 The polyester concrete shall be struck off to the established grade and cross
7 section and consolidated to the required compaction. Forms shall be coated with
8 suitable bond release agent to permit ready release of forms.
9

10 The Contractor shall texture the overlay surface by combing in accordance with
11 Section 6-02.3(10) except as otherwise specified. The texture shall be applied
12 immediately behind the finishing machine. The tine spacing shall be approximately
13 25 millimeters.
14

15 The polyester concrete overlay shall receive an abrasive sand finish. The sand
16 finish shall be applied immediately after overlay strike-off and before gelling occurs.
17

18 The surface texture of polyester concrete surface shall be uniform and shall have a
19 friction number of not less than 35 as determined by ASTM E 274.
20

21 After initial finishing, the polyester overlay may require grinding of rough areas as
22 determined by the Engineer. The grinding shall be done in a manner that will not
23 damage the existing bridge deck. Rotary milling machines are not allowed.
24

25 The Contractor shall demonstrate to the satisfaction of the Engineer that the
26 method and equipment for grinding the polyester overlay are adequate for the
27 intended purpose and will provide satisfactory results. The removal shall not
28 commence until the Contractor receives the Engineer's approval of the grinding
29 equipment.
30

31 The bridge deck areas specified by the Engineer to receive grinding shall be
32 ground in a longitudinal direction. The grinding equipment shall use diamond
33 tipped saw blades mounted on a power driven, self-propelled machine that is
34 specifically designed to texture concrete surfaces. The grinding equipment shall
35 have a blade spacing to provide grooves that are between 2.5 and 3.8 millimeters
36 wide. The land area between the grooves shall be approximately 3.2 millimeters.
37

38 The Contractor shall contain, collect, and dispose of all concrete debris generated
39 by the grinding operation in accordance with Item 2 of the polyester concrete
40 submittal in Section 6-09.3(2) as supplemented in these Special Provisions.
41

42 Prior to opening the overlay area to vehicular traffic the finished overlay shall be
43 power swept to remove excess loose aggregate and abrasive sand. The
44 Contractor shall demonstrate to the satisfaction of the Engineer that the power
45 broom equipment will not damage the finished overlay. Any damage to the finished
46 overlay caused by the power broom shall be repaired at no additional expense to
47 the Contracting Agency.